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## AMMUNITION BULLETIN N°16.

FOR INSPECTING ORDNANCE OFFICERS.

(JANUARY 1941.)

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CHIEF INSPECTOR OF ARMAMENTS,  
WOOLWICH, S. E. 18.



SECURITY

AMMUNITION BULLETIN NO.16  
For INSPECTING ORDNANCE OFFICERS

January, 1941.

Issued By :-

CHIEF INSPECTOR OF ARMAMENTS,  
WOOLWICH.

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175. TABLE OF FUZES APPROVED FOR VARIOUS NATURE OF SHELL.

Note. Wherever Fuze No. 117 is quoted Fuze No. 117C may be used.  
 " " " 119 " " " 119A " " "

Fuzing for	H.E.	Shrap.	H.E. Smoke	Purst Smoke	H.E. Chem.	
<u>B.L.</u>						
4.5-in. Gun	119	-	-	-	-	-
60-pr. Gun	117 or 119	88	-	-	-	-
		220 for Practice				
5.5 Gun/How.	119 or 231	-	-	-	221	-
6-in. Gun Field Service	106E, 117 or 119	88	-	-	-	-
6-in. Gun Coast Defence.	45, 45P 100, 138 or 230	88	-	-	-	<u>C.P.B.C.</u> 480
6-in. How.	117, 119 or 231	-	-	106E	221	<u>STAR</u> 188
8-in. How.	119 or 231	-	-	-	-	-
9.2-in. Gun Field Service	101, 117 or 119	88	-	-	-	-
9.2-in. Gun Coast Defence	45, 117 or 119	-	-	-	-	<u>A.P.C.</u> 346
9.2-in. How.	117, 119 or 231	-	-	-	-	-
12-in. How.	117, 119 or 231	-	-	-	-	-
14-in. Gun	106E	-	-	-	-	-
15-in. Gun Coast Defence	159	-	-	-	-	<u>A.P.C.</u> 159
18-in. How.	106E, 101B or 231	-	-	-	-	<u>C.P.B.C.</u> 270
<u>Q.F.</u>						
2 Pr. A.T.	-	-	-	-	-	<u>A.P.</u> 281
2 Pr. Mk. VIII	243	-	-	-	-	-
40 mm.	251	-	-	-	-	-
3 Pr. 2 cwt.	-	-	-	-	-	<u>A.P.</u> 280
6 Pr. 10 cwt.	242 or 244	-	-	-	-	-
12 Pr. 12 cwt.	44, 45 or 45P	-	-	-	-	-
3-in. How.	117 or 119	-	-	-	-	-
3-in. 20-cwt.	119	199	-	-	-	-
18 Pr.	117 or 119	80	-	117	-	-
25 Pr.	117 or 119	-	220 or 221	-	221	<u>Chem Purst</u> 117
3.7-in. How.	106E	80	83	106E	-	<u>STAR</u> 183
3.7-in. Gun	199, 207 or 209	199 or 207	-	-	-	-
4.5-in. How.	106E, 117 or 119	-	83	117 or 119	-	-
4.5-in. Gun	207 or 209	199 or 209	-	-	-	<u>S.A.P.</u> 501
4.7-in. Gun	45 or 45P	88	-	-	-	<u>S.A.P.</u> 500 or 501
2-in. Mor.	151 or 151A	-	-	-	-	-
3-in. Mor.	150, 152 or 152A	-	-	-	Chem- ical	<u>Smoke</u> 150, 152 or 152A
3.7-in. Mor. Mines	106E or 231	-	-	-	-	-
A.T. Mk. II	1	-	-	-	-	-
A.T. Mk. IV	3	-	-	-	-	-

176. SAFETY DISTANCES FOR BUILDINGS CONTAINING EXPLOSIVES.

An amendment to Magazine Regulations covering paras.40 to 49.A, safety distances, has been approved and will shortly be published. One or two novel features are introduced on which the following comment may be of general interest to Ordnance Officers.

1. The regulations in regard to safety distances have been standardised for all Services, as the draft has been prepared by the Explosive Storage and Transport Committee which is an inter-Service Committee.

2. Provision has been made for storing ammunition in populated areas where the safety areas available fall short of those specified in the Regulations for the total explosive quantity in the building. This is effected by the design of special buildings, of which there are two types, viz. The Bin Type building as used at Anti-Aircraft Equipment Ammunition Storehouses and Grouped Buildings as used at R.A.F. operational stations.

The Bin Type building has been described at Item 3 of Bulletin No.1.

Grouped buildings, are ordinary rectangular buildings to which a standard explosive limit of 10,000 lbs. category Z, has been allotted. Six of these buildings may be grouped together within a rectangular traverse and separated by inside traverses. The basic principle of the lay-out is that the foot of the traverse must lie outside the crater diameter of the explosive quantity allocated to the individual building. The outside safety distance to be adopted for the group will be that corresponding to the explosive quantity in one building and not to the total explosive quantity in the group of six buildings.

It is of interest to note that this principle has proved sound in a case where the contents of one of these buildings detonated without setting off the others. One or two of them were damaged.

3. Provision is made for two sets of outside safety distances, one being the Normal, applicable to civilian property and the other being Reduced ( $\frac{1}{2}$  of the Normal), applicable to Government property only. Thus a Barrack building may be nearer a building containing explosives than a Cinema or Church.

4. For safety distance purposes, explosives have been placed in three Categories indicated by the letters X, Y or Z against the explosive in the Classification Table.

X. Explosives having an explosion or fire risk with local effect only.

Y. Explosives having a general fire risk or with an explosion risk but not with a risk of explosion en masse.

Z. Explosives having a **risk** of explosion en masse.

The introduction of this category system was notified in Bulletin No.4, Item 33.

5. In view of the tendency to place ammunition underground with a view to protection against bombing, an additional table, shewing safety distances between underground buildings containing explosives has been included, these distances being graded according to the varying types of soil which may be met with.

177. PRIMERS PERCUSSION Q.F. CARTRIDGE. SERVICEABILITY IN EXTRACTED CARTRIDGES.

Reference Item 144, Bulletin No.14 and the final paragraph of A.C.I. No.644 of 1939, dealing with cartridges hand or power rammed and subsequently unloaded.

If the primer in an extracted cartridge is marked on its base with a letter "Q", such primer need not be replaced and in this respect the cartridge will still be considered serviceable.

178. CARTRIDGES, S.A., .303-INCH STANDARDISATION FOR ALL SERVICES.

In order to avoid the loss of machine capacity resulting from the production of different standards of .303-inch small arm cartridges it has been decided to standardize manufacture for Naval, Land and Air Services. This standardised ammunition, which is fitted with a strawboard wad, will be suitable for use in synchronised guns for a period up to 2 years from the date of manufacture and is distinguished by the year of manufacture being shown in full in the base marking of the cartridge (e.g. 1940). Packages containing this ammunition in cartons, bandoliers or chargers and cases charger will bear an additional label H.628, on which the following will be printed in red:-

" ALL SERVICES  
NOT TO BE FIRED FROM SYNCHRONIZED GUNS  
AFTER -/-/ - "

The date shown on the label (e.g. 6/8/42) will be two years after the date of manufacture.

In the event of the production, at some future date, of ammunition unsuitable for use in synchronized guns, the last two figures only of the year of manufacture will appear in the base markings of the cartridge. Packages containing this ammunition will not carry the label H.628.

Notification of this standardisation has appeared in A.C.I.1486.

179. PROPELLANTS, CORDITE W.M.

In order to provide a means of readily verifying the presence of carbamite in the abovementioned cordite, the use of dyed carbamite has been approved. The inclusion of the dyed carbamite imparts a violet colour to the cordites.

Undyed carbamite will continue to be used for Cordite S.C.

180. DETONATORS (ELECTRIC AND NON-ELECTRIC) - USE WITH GUNCOTTON AND C.E. PRIMERS.

Detonators, electric Nos.9 Mk.IV, 13 Mk.III and Non-electric No.8 Mk.VII were designed to fit the perforation in the Guncotton Primer Mk.I. The new types of detonators, No.27 Mk.I (non-electric) and No.33 Mk.I (Electric) are bigger in diameter and have necessitated the introduction of the Guncotton Primer Mk.II which is designed with a perforation of larger diameter. The C.E. Primer, Mk.I, was designed subsequent to the introduction of the new types of detonators and has the perforation of larger diameter. The situation regarding the suitability of the use of the various detonators and primers has been circulated to all commands and may be summarised as follows :-

- (a) Detonator electric No.9 Mk.IV cannot be relied upon to fire when connected in series and must be replaced by Detonator, Electric No.33.
- (b) The remaining detonators of low diameter design i.e. No.8 Mk.VII (Non-Electric) and No.13 Mk.III (Electric) are suitable for use in Guncotton Primer Mk.I and, with suitable packing to ensure a good fit can be used with Guncotton Primer Mk.II or C.E. Primer Mk.I.
- (c) The new type detonators, i.e. No.27 Mk.I (Non-Electric) and No.33 Mk.I (Electric) are suitable for use in the Guncotton Primer Mk.II and the C.E. Primer Mk.I. These detonators are not suitable for use with the Guncotton Primer Mk.I.

181. PRIMERS PERCUSSION Q.F. CARTRIDGE.

Reference Item 144, Bulletin No.14. The adoption of Q.F. Composition has been approved as the cap filling for the Nos.1,2,5,9,11 and 15 primers.

182. FUZE WASHERS.

It is notified for information that separate washers are not required when assembling the following fuzes to shell. Additional metal equivalent to the thickness of the washer will be left on the bodies and the step thus formed will prevent the securing band of the cover from being nipped.

Fuze No.199.	Mks.VI and VII.
" 207.	Mk. IV
" 220	Mk. IV
" 221	Mk. II
" 208	

183. GRENADE, SELF-IGNITING PHOSPHORUS, - STORAGE.

Reference Item 118, Bulletin No.12. The following information is now available.

S.I.P. grenades need not be stored under water. They should be stored in brick, concrete or sandbagged shelters, or underground.

They should be stored in small lots which should never exceed 2,000 in one lot and must not be stored in ammunition depots or near ammunition or buildings.

The following table should be taken as a guide to safety distances:-

<u>Number in Lot.</u>	<u>Distance from Ammunition or Buildings.</u>	<u>Distance from other lots.</u>
50 or less	25 <sup>*</sup> yards	10 yards
500	50 <sup>*</sup> "	20 "
2000	200 <sup>*</sup> "	75 "

\* Or the "safety distance" for the quantity of explosive in the building, whichever is the greater.

Adequate fire fighting appliances should be available near the stack.

Severe frost will NOT cause breakage of the bottles. The effects of freezing on performance are being investigated and information will be published in due course.

184. GRENADE, HAND, ANTI-TANK, TYPE S.T. (Fig.43).

This H.E. grenade which is designed to adhere on impact weighs 2½ lbs. The body consists of a globular glass flask filled with Nobels Explosive No. 823 (a viscous mixture containing, primarily, nitro-glycerine and nitro-cellulose) and closed at the neck by an aluminium container in which the detonator assembly is inserted when prepared for use. The exterior of the flask is coated with an adhesive mixture and for storage and transport is enclosed by a hinged protective outer casing. The outer casing is fitted with rubber plugs in the interior to bear against the flask and is released by the withdrawal of the release pin. The striker, with its spring under compression, is contained in the moulded handle of the grenade and is held in the armed position at its inner end by a safety pin which is removed immediately before the grenade is thrown and at its outer end by a lever handle similar to that used with the "mills" pattern grenade. This lever becomes detached when released by the hand as the grenade is thrown. The detonator assembly contains an initiator cap with a 5 second length of fuze and a detonator positioned in a perforated C.E. pellet. These detonator assemblies are packed separately from the grenades and are inserted when required by removal of the moulded handle which gives access to the aluminium container. During transport and storage the container is closed by a removable wooden plug.

Packing.

The usual packing is five grenades in a tinmed plate carrier, and four carriers, in a trade pattern wood package. Packages containing more than four carriers may, however, be met with. The detonator assemblies are issued usually in separate packages, but, some of the earlier issues may be in the tinmed plate carriers. Alternatively three carriers may be packed in a crate.

Storage and Transport (Group 8, Category 2).

The explosive filling of the S.T. Grenade is a viscous fluid which tends to flow at moderate temperatures. As the filling is rich in Nitro-glycerine, the Grenade is somewhat more sensitive than is usually the case with Service H.E.

For this reason, and because of the material of the flask the storage and transport of the Grenades calls for very great care, if accidents are to be avoided. The Grenades are definitely liable to sympathetic detonation, i.e. if one exploded the whole box or consignment would probably also explode.

Storage temperatures should be as low as possible and special care is necessary to protect the grenades, whether packed or exposed, from the direct rays of the sun. High temperatures cause the explosive to run, and, in general, the grenade is only suitable for storage in temperate climates.

The glass container is, from its nature, somewhat sensitive to shock and care must be taken in the handling of packages to avoid jars likely to cause breakage, as if this occurs, the sensitiveness of the Grenade may be considerably increased. If a package is dropped, it must be set aside for examination by the I.O.O.

The grenades should be stacked in small, well separated units and, for preference, apart from other explosives in the same group.

185. Amendments.

Bulletin No.14:-

Item 143.

Line 8. Delete "5.5" and substitute,  $3.5 \pm 0.15$ .

Line 9. Delete "2.5" and substitute,  $2.0 \pm 0.15$ .

Item 150.

Column No.5. Delete "16 grain" and substitute, 18 grain.

Bulletin No.14, Item 153:-

Page 9, Column 6, line 8:-

Delete "N.S." and substitute M.S.

Page 10, Column 6, lines 6, 9 and 17:-

Delete "N.S." and substitute M.S.



ENEMY AMMUNITION.

186. CARTRIDGE Q.F. H.E. 65/17 mm. (ITALIAN)  
(Figs. 44 and 45)

The available details of this fixed Q.F. round are as follows :-

Cartridge Case.

Brass tapered case with flange and screw threaded primer hole. The case is approximately 2.8 inches in length and has a diameter at the mouth of 2.6 inches.

Propellant Charge.

The charge consists of 5 ozs of flaked cordite contained in a net bag. The bag is choked with silk sewing and contains a paper label giving details of the charge. A folded strip of tinfoil is placed on top of the charge. The charge is held in position in the case by a cardboard cup surmounted by a cardboard distance piece above which is a second cardboard cup and dried vegetable packing.

Primer.

Beyond the diameter of the base, which is .7 inch, no further details are as yet available.

Shell.

The shell, the nature of which is H.E., is of steel with parallel walls and is fitted with a base plate and copper driving band. A band is formed on the shell body just below the shoulder. The nose is fitted with a steel fuze hole adapter secured by a set screw. The external shape of the adapter does not correspond with the contour of the nose of the shell. The tritolo (T.N.T.) bursting charge is a cast filling with exploder cavity and an aluminium exploder container. The exploder, carried in the container consists of three paper wrapped H.E. pellets. Above the exploder container a cup shaped aluminium plug containing a H.E. filling is screwed down in contact with the top exploder pellet through the fuze hole adapter. This fitting, in conjunction with a powder pellet in the base of the fuze appears to perform the function of a gaine, in converting the igniferous action of the fuze to detonation. The shell is painted red from the shoulder to the nose and has a green band .08-inch wide above the driving band. Apart from stencilling, which includes the word "TRITOLO" the body is otherwise unpainted. The weight of the filled shell is approx.  $9\frac{1}{2}$  lbs.

Fuze.

This is an igniferous fuze of the graze type and consists of a graze pellet with needle which is held off the detonator by a ferrule-washer and stirrup spring situated below the pellet. The safety devices include a ferrule and spring interposed between the pellet and detonator and a pin to seal the flash hole leading to the powder pellet in the base of the fuze.

The cylindrical body of the fuze is screw-threaded externally for insertion in the adapter and is provided with a screw-threaded hole in the head to receive the cap which carries the detonator. Internally it is recessed to accommodate the graze pellet and an internal shoulder is formed near the bottom of the recess to form a stop for the ferrule-washer. The lower portion of the recess is prepared to receive the base plug. The base plug screws into the underside of the body and is provided with a central hole which contains a perforated pellet of gunpowder. On the upper side this hole is chamfered to form a seating for the scaling pin. On the underside of the base plug a cylindrical projection is formed which fits into the cup shaped aluminium plug positioned over the exploder container. The central hole passes through this projection and is lightly closed on the underside by a washer and cloth disc.

The graze pellet consists of a cylindrical brass body cut to three diameters the greatest of which forms the base. The top is slotted to take the needle. Four flash holes are drilled at a slight angle in the base and metal is cut away to unmask these holes. A central hole is also drilled to receive the stem of the sealing pin. Four radial arm extensions are formed on the base of the pellet.

The sealing device consists of a pin with an enlarged head shaped to seat in the chamfered upper side of the hole in the base plug. The head is tinned and the stem is screw threaded. A stirrup spring is placed over the stem and retained in position against the head by a nut. The stem passes through the central hole in the base of the graze pellet and is secured by a nut.

The brass ferrule-washer fits over the stirrup spring of the sealing device and bears against the radial arms at the base of the graze pellet. Forward movement of the ferrule-washer is prevented by the shoulder formed in the recess in the fuze body.

A second stirrup spring is fitted over the top of the graze pellet and supports a ferrule which prevents the needle reaching the detonator in transport. The stirrup spring is also the means of retaining the needle in position.

#### Action.

From the information available the action of the fuze appears to be as follows :-

On acceleration the ferrule sets back overcoming the arms of the stirrup spring. At the same time **the sealing** pin also sets back with the graze pellet and masks the hole in the base plate; thus protecting the powder pellet from the flash if the detonator is prematurely fired. The fuze is now armed and the needle is held off the detonator in flight by the lower stirrup spring and the ferrule-washer. On graze the graze pellet is carried forward by momentum pulling the lower stirrup spring through the ferrule washer and unmasking the hole in the base plate. The needle pierces the detonator and the flash passes through the flash holes in the base of the graze pellet to the perforated pellet of powder in the base plate. The explosion of this pellet detonates the H.E. filling in the cup shaped aluminium plug. The detonation wave is amplified and passed to the bursting charge by the pellets in the exploder container.

#### Storage and Transport.

During transport and storage plugs are fitted in place of the primer and fuze. The exploder pellets are carried separately and the fuze cap containing the detonator is replaced by a plug.

#### 187. SMALL ARM AMMUNITION (ITALIAN)

Reference Item 153, Bulletin No. 14. The following additional information has been received:-

- (a) The 7.7 mm. Armour Piercing bullet with green tip contains incendiary mixture.
- (b) The 7.7 mm. Armour Piercing Incendiary bullet with blue tip contains phosphorus.

188. MARKINGS OF ITALIAN CHEMICAL SHELL.

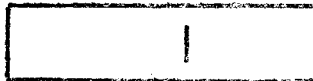
It is reported from a reliable source that Italian gas shell carry the following markings:-

A coloured cross on a stencilled rectangle, the colour of the cross denoting the nature of the chemical filling. Thus:-

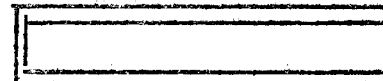
Red = lachrymatory, such as C.A.P.	(Tear gas)
White = phosgene or similar lung irritant.	(Choking Gas)
Black = D.A. or similar nose irritant.	(Nose Gas)
Green = Mustard or other blister gas.	(Blister Gas)

It is believed that Chloropicrin is marked with a Red and White Cross and it is known that store tanks containing it were marked in this manner. This is very probable since Chloropicrin is both a lachrymator and a lung irritant. The report states that there are two types of gas shell, one with a diaphragm and one with a gaine. They were marked :-

Diaphragm  
type.



Gaine  
type



It is possible that bomb markings are similar.

The above markings were in use in 1936 and there is no indication that these have been changed. Indeed it is unlikely that they have been changed owing to the work in organisation and supply this would involve.

189. CARTRIDGE Q.F. A.P.C. 65/17 mm. (ITALIAN)  
(Fig. 45)

The available details of this fixed Q.F. round are as follows :-

The cartridge case and primer are the same as those described for the H.E. round (Item 186). The propellant charge is also similar but is 7 ozs. in weight.

Shell.

The shell has the characteristic solid head of a piercing shell and is fitted with a copper driving band. The head is concave and is fitted with a ballistic cap which is attached by a screw thread and secured by a fixing screw. The concave head is probably designed to prevent the shell ricocheting on armour plate. The shell is closed at the base by a base piece which is screwed into the shell. A gas tight seal is effected between the base piece and the shell body by means of a copper ring and an annular rib formed on the underside of the shell body. The inner side of the base piece is recessed and threaded to receive the base end of the fuze. The interior of the shell is varnished and contains a bursting charge of tritolo (T.N.T.) with a central cavity to receive the fuze with exploder container.

Fuze.

The fuze is of the graze type and consists of a cylindrical steel body screw threaded externally at the base, for insertion in the inner side of the base piece of the shell, and internally at the front end for the attachment of the exploder container. The interior of the body is divided into two parts by a diaphragm which has a central hole. The exploder container is fitted in the part above the diaphragm and the mechanical portions of the fuze are assembled in the part below the diaphragm. The fuze body is closed at the base by a cylindrical steel plug which is bored and screwthreaded on its inner side to receive a steel tube which houses the detonator with a creep spring and split ferrule. The steel tube is closed at its

inner end by the needle holder which is of brass and is provided with two flash holes and carries the needle. Immediately above the diaphragm is the delay pellet holder which is open and flanged to fit over the central hole of the diaphragm and has a perforation at the inner end. The exploder container is of steel with a perforation at the inner end. The perforation is lightly closed by a disc.

Details of filling are not yet available.

#### Action.

From the information available the action appears to be as follows:-

During transport and storage the detonator is held off the needle by the split ferrule. On acceleration the split ferrule sets back and expands around the detonator leaving the detonator held off the needle by the creep spring only. On graze the detonator is carried onto the needle by momentum and is fired. The flash from the detonator passes through the flash holes of the needle holder and ignites the delay pellet which in turn initiates the container filling. The container filling, initiated in this manner, is apparently capable of bringing about the detonation of the tritolo bursting charge. This detonation is probably of a low order and would result in large shell fragments.

#### Markings.

The body of the shell is painted grey below the shoulder and red from the shoulder to the tip.

A green band 2 mm. wide is painted immediately above the driving band.

A white band is painted around the body midway between the green band and the shoulder.

#### 190. Q.F. SEPARATE AMMUNITION 77/28 mm. (ITALIAN)

The ammunition used with the Q.F. 77 mm. (28 calibre) weapon is of the separate type. The following details are available:-

#### Cartridge.

The cartridge case is of brass and is prepared at the base for the insertion of a primer. The propellant charge is flaked cordite and is arranged in three superimposed sections. Each section is contained in a bag of coarse unbleached net. The mouth of the case is closed by means of an unwaxed cardboard cup which is fitted with a fabric loop for removal of the cup to vary the charge.

#### Shell.

The H.E. shell, which is fitted with a grooved copper driving band, is designed with a screwed in base to enable a block filling to be inserted and is prepared at the nose to receive a fuze hole adapter which forms the head of the shell. The external shape of the adapter decreases the slope above the shoulder of the shell and gives the effect of a somewhat rounded head. The bursting charge is 14 ozs of TRITOLO (T.N.T.) and is inserted in a cylindrical cardboard container designed to provide an exploder cavity. The upper portion of the shell cavity, where it tapers above the shoulder, is occupied by a circular wood block. The exploder container and fuze are the same as those used in the Q.F. H.E. 65/17 mm. shell described in Item 186. The exploder consists of a cardboard cylinder with metal ends the contents of which resembles fine dark sawdust. The nature of the explosives has not yet been definitely identified. The weight of the filled shell is 9-lbs. 6-ozs.

#### Markings.

The body of the shell is painted grey from the shoulder to the base. The body above the shoulder and the fuze hole adapter are painted red.

191. FUZE FOR DESTRUCTION OF ABANDONED AIRCRAFT (ITALIAN)  
(Fig. 47)

The fuze is designed to be used with 1 Kg. and 2 Kg. incendiary bombs or the 2 Kg. Spezzoni H.E. bomb to enable Italian crews to destroy their aircraft when forced down in territory under British control. The bomb, fitted with the fuze for this purpose, is securely attached near the petrol tank or other vulnerable part of the aircraft and should be removed complete with fuze when found. The fuze can be removed by unscrewing the standard fuze adapter of the bomb, complete with the fuze. This removes the main detonator.

The fuze consists of a cylinder, (1) (dimensions not yet available) divided into halves by a diaphragm (2) and fitted with an adapter at the base (3) for insertion in the standard fuze adapter of the abovementioned bombs. Pivoted in the centre of the upper side of the diaphragm is an arm (4) carrying a striker (5). The arm is cut away on the underside for the loose attachment of the lanyard and prepared to receive one end of a spring, the other end of which is attached to the diaphragm. The diaphragm is also bored and fitted with an initiator (6) attached to a length of fuze (7) which is housed in the lower half of the cylinder. The length of fuze is led to the adapter at the base and gives a delay of 90 seconds. The lanyard (8), twenty three feet in length, is housed in the upper compartment of the cylinder and is led through a central hole in the closing disc for attachment to the cover.

The cylindrical cover (9) is a close fit over the upper half of the fuze body and is fitted with a loop for the attachment of the outer end of the lanyard. A hole (10) is provided in one side of the cover which is used in conjunction with a similar hole in the fuze body for the insertion of a safety pin. The presence of the safety pin prevents the turning of the striker arm on its axis.

Action.

After withdrawing the safety pin, the fuze cover is removed and carried away as far as the attached lanyard will permit i.e. 23 feet. On pulling the lanyard further the striker arm is rotated on its axis thereby putting further tension on the spring. When the striker arm has passed the central position the striker is driven onto the initiator by the spring and the lanyard becomes detached. The length of fuze is ignited by the initiator and at the end of 90 seconds the bomb explodes.

192. FUZE, ELECTRIC, RHEINMETALL NO. 50 (GERMAN)

Reference Item 156, Bulletin No. 14. The instructions regarding the precautions to be observed when dealing with bombs fitted with this fuze, (given in the remarks column) are cancelled and the following substituted:-

Discharging apparatus must not be used. Fuze has anti-handling device and bomb containing it must NOT BE TOUCHED OR SUBJECTED TO ANY VIBRATION FOR SIXTY HOURS.

A fuze having the number (50) included in a circle is used in the German Magnetic Mines.

FIG. 43.

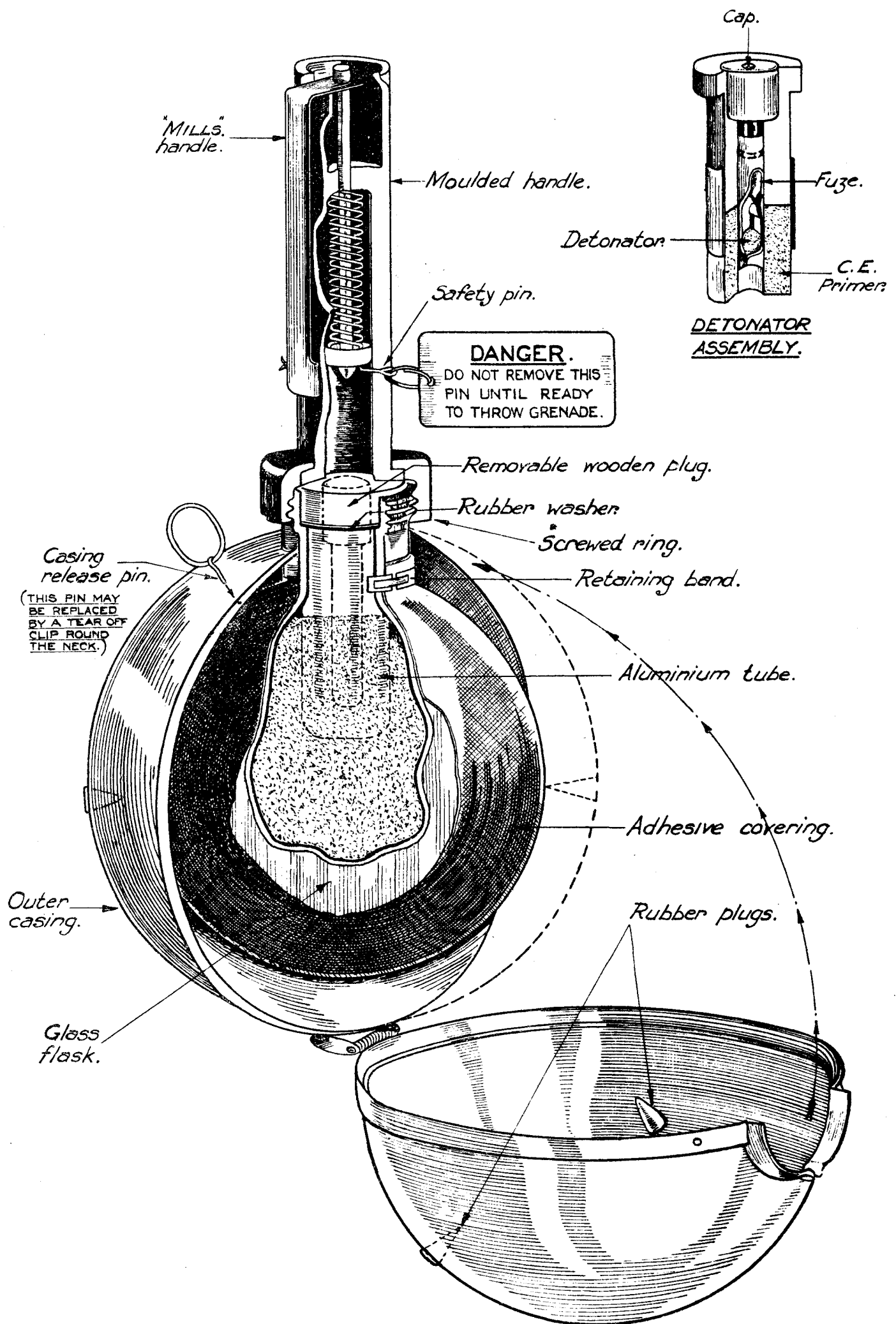


FIG. 44.

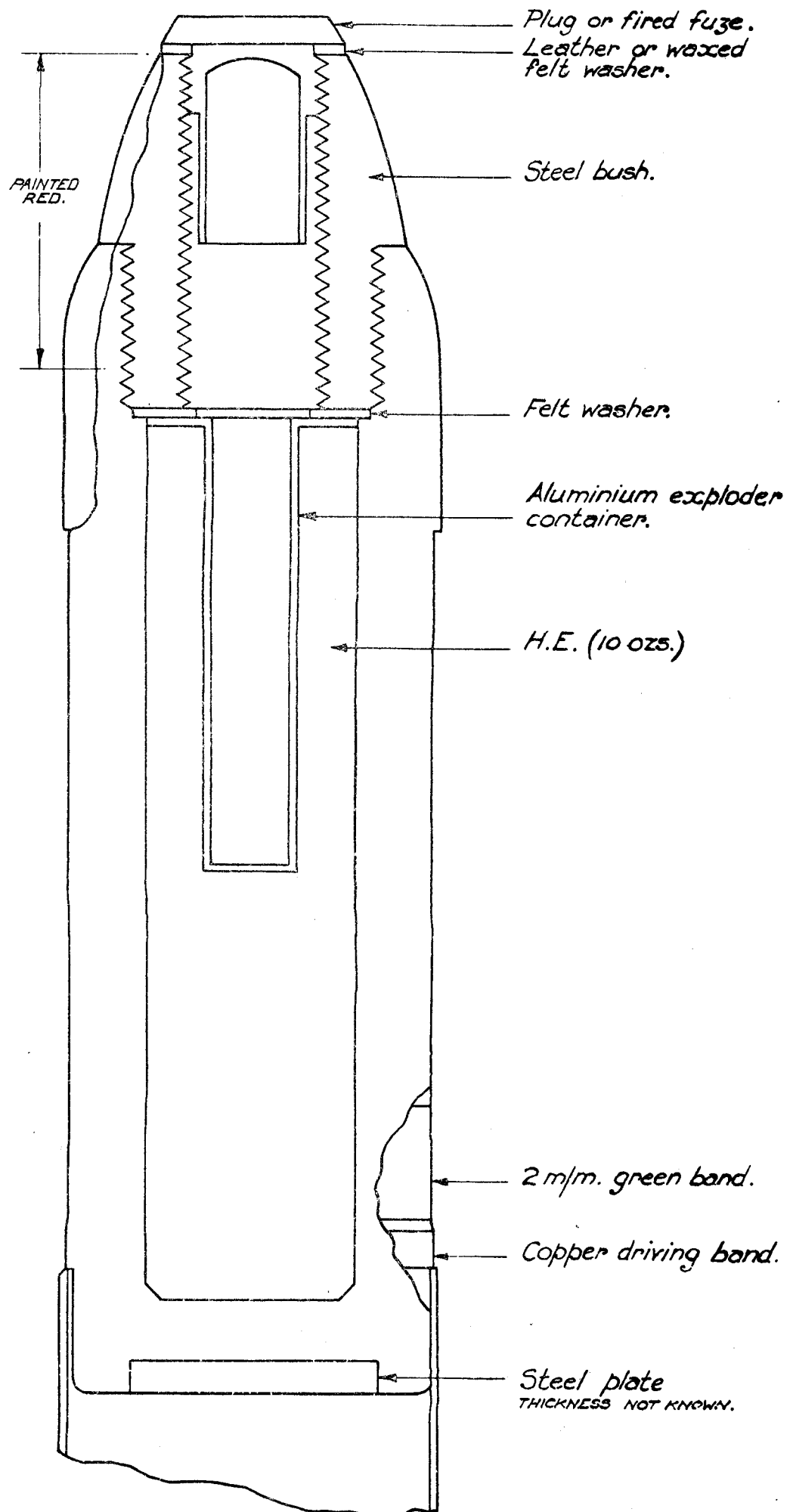
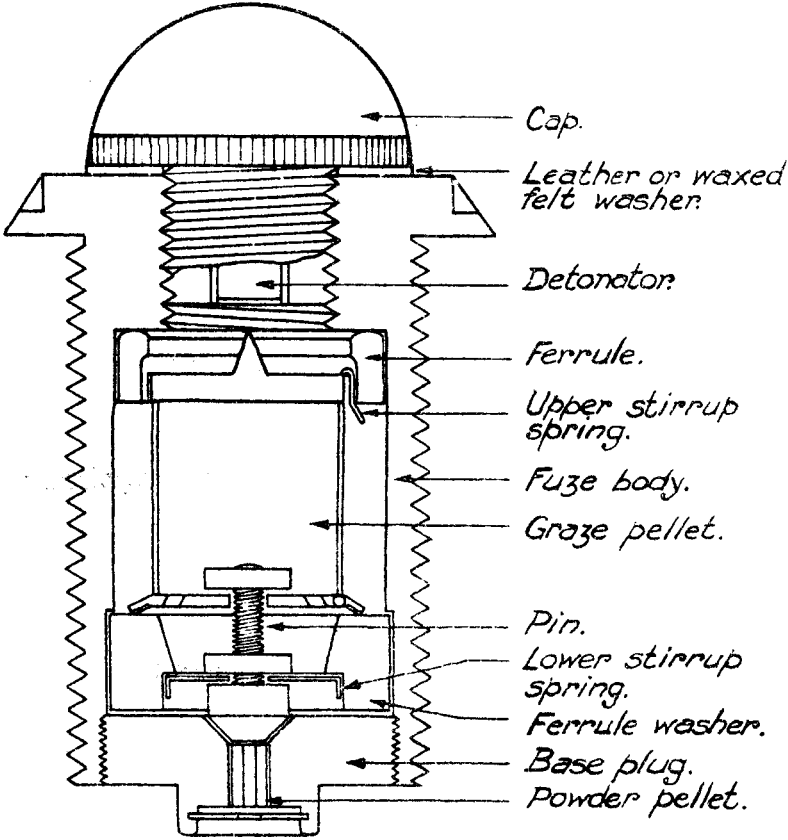
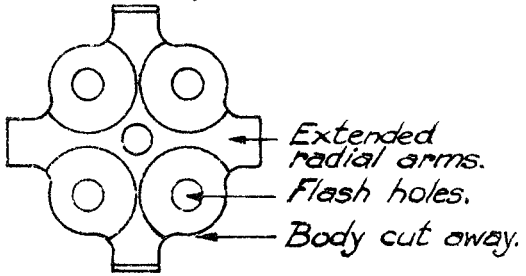


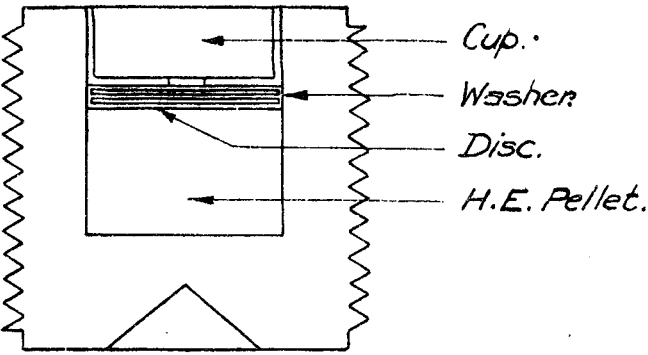
FIG. 45.



FUZE ASSEMBLY.



BASE OF MECHANISM BODY.



ALUMINIUM PLUG.



FIG. 46.

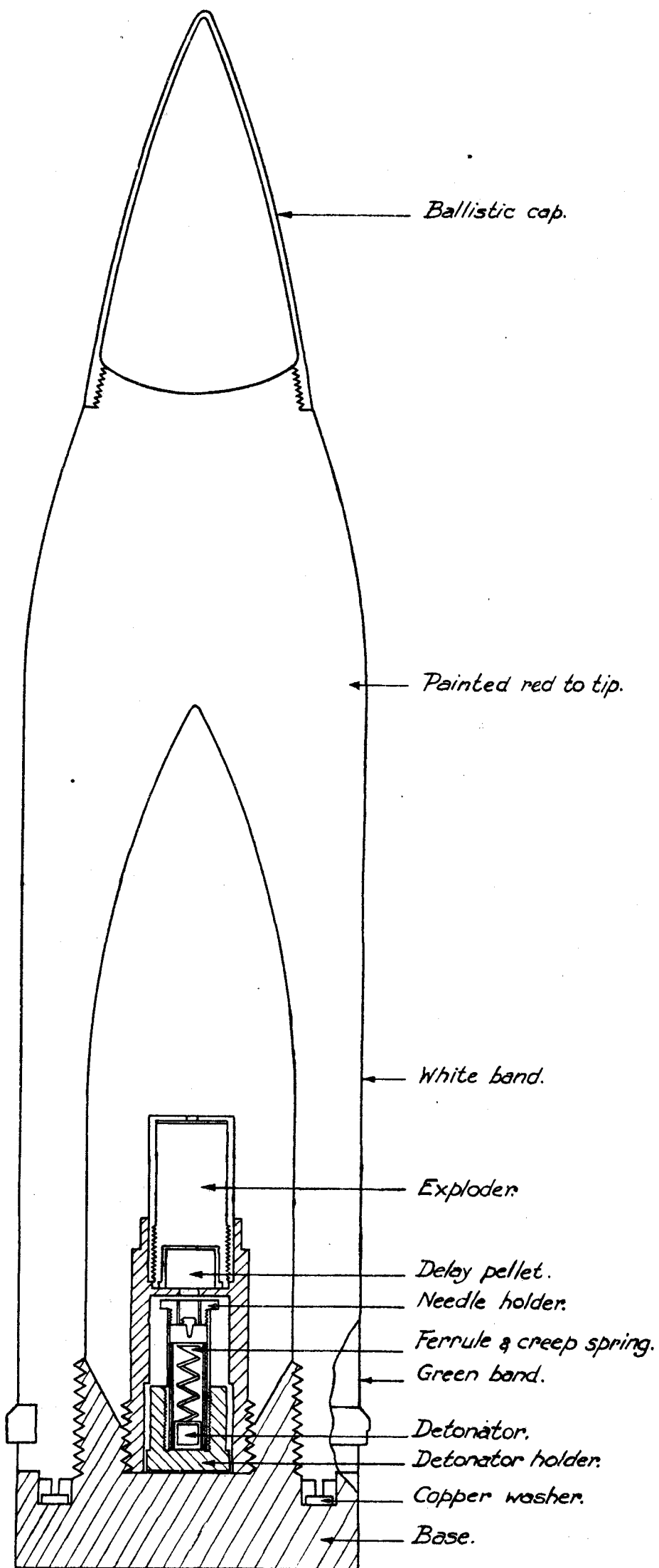


FIG. 47.

